

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

ORDER NO. 00-009

WASTE DISCHARGE REQUIREMENTS  
FOR  
MITSUBISHI CEMENT CORPORATION, OWNER/OPERATOR  
CUSHENBURY PLANT  
CLASS III WASTE MANAGEMENT FACILITY  
Lucerne Valley – San Bernardino County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Mitsubishi Cement Corporation (hereinafter also referred to as the discharger), HCR Box 400, Lucerne Valley, California 92356, submitted current information to update the waste discharge requirements for an existing Class III Waste management Facility (WMF). The discharger's plant is located at 5808 Highway 18, Lucerne Valley, California 92356 as shows in "Site Map", incorporated herein and made a part of this Board Order.
2. The discharger operates a cement manufacturing plant which uses limestone, mined from rock units located within the vicinity of the plant, as raw materials. The raw feed material is calcined in the preheater/precalciner tower and sintered in the kiln. The clinker is cooled and ground to final product in finish mills. The cement is stored in silos for shipment to market.
3. The plant manufactures cement according to a "dry" process. Water usage at the facility is limited to the machine cooling system, finish mills, dust suppression, cleaning activities at the maintenance shops, and domestic consumption. Water is provided to the plant through ground water wells, which are owned and operated by the discharger, located on the site in Lucerne Valley.
4. Mitsubishi Cement Corporation is located on approximately 790 acres on E1/2, of Section 10, T3N, R1E, SBB&M.
5. Definition of terms used in this order:
  - a. Waste Management Facility (WMF) – The entire parcel of property where waste discharge operations are conducted.
  - b. Waste Management Unit (WMU) – An area of land, or a portion of a waste management facility, where waste is discharged. The term includes containment and ancillary features for precipitation and drainage control and monitoring.
  - c. Landfill – a waste management unit where waste is discharged in or land for disposal. It does not include surface impoundments, waste pile, and land or soil treatment.
  - d. Discharger – discharger means any person who discharges waste that could affect the quality of the waters of the State, and include any person who owns a waste management unit or who is responsible for the operation of a waste management unit (Title 23, California Code of Regulations (23CCR) Section 2601).
6. The landfill became subject to Waste Discharge Requirements (WDRs) under Board Order No. 76-18 in April 22, 1976. The WDRs were updated and superseded by Board Orders No. 84-66 in May 16, 1984, and Board Order No. 90-078 in November 28, 1990. The WDRs are being updated to comply with Section 13263 of the California Water Code and to incorporate the applicable provisions of Chapter 15, Division 3, Title 27 of the California Code of Regulation.

7. The landfill is unlined, and receives approximately 2 tons-per-day of Class III non-hazardous and inert waste as defined by California Code of Regulations, Title 27. Specifically, waste consists of wood, steel, paper, rubber and lunch refuse. The refuse is placed in layers mixed with waste clinker, cement, soil and rock. Final cover consists of unusable limestone from the mining process, which preclude possible wind or rain erosion. The plant is a 24 hour/day, approximately 330-days/year operation.
8. The WMF encompasses 10.5 acres, and consists of a series of cells. Waste disposal occurs in the western side of the property on approximately 4.4 acres. The Mitsubishi Cement Corporation expects the Cushenbury Plant's landfill to reach capacity in the year 2035.
9. The discharger submitted an updated Report of Waste Discharge (ROWD) on March 1, 1999.
10. Mitsubishi Cement Corporation is not allowed to dispose at this facility the following wastes:
  - a. Municipal solid waste; except lunch refuse
  - b. Sludge (including sewage sludge, water treatment sludge, and industrial sludge); Septage
  - c. Liquid waste, unless specifically approved by this Order or by the Regional Board's Executive officer;
  - d. Animal waste;
  - e. Hazardous or, designated waste, ash, or other wastes determined by the Regional Board's Executive Officer to pose a potential; threat to water quality; and
  - f. Hot, burning waste materials or ash
11. Any hazardous materials found at the WMF will be stored in a hazardous material storage shed and will be removed within 90 days by a hazardous waste hauler licensed by the State of California.
12. The terrain in the vicinity of the site characterized by north sloping. The land surface within the boundaries of the site is predominantly sloping within scattered erosional channels that are in a northwesterly direction. The elevation at the north of the site is 4,174 feet above sea level. Maximum elevation is about 4,249 feet above sea level in the southeast corners of the site.
13. Land within 1000 feet of this site is natural desert to the east and north of the site, and mountain slopes to the south of the site.
14. The site geology in the vicinity of the WMF is a north facing alluvial fan with a minimum of 400 feet of mixed sand, gravel and clays. The alluvial soils have a moderate to high permeability. The alluvial deposits are in excess of 400 feet thick.
15. The average annual rainfall for the general vicinity of the site ranges from 5 inches in the central basin of Lucerne Valley to over 20 inches in the San Bernardino Mountains. Ground water recharge in the Lucerne Valley Hydrologic Unit results from deep percolation of runoff from precipitation in the San Bernardino Mountains.
16. Surface water drainage from the watershed above the facility is north to southwest into the Lucerne Valley. Ultimately, all surface flows drain towards the north.
17. A large, normally dry, wash, three feet deep and up to twenty-five feet wide, passes directly to the west of the Cushenbury plant.
18. The discharger reports that the information obtained from onsite and offsite wells, which provide water for industrial and domestic use at the plant, indicates that the depth to ground water is approximately 60 feet beneath the landfill. Samples collected from monitoring wells M1, M2, and M3 in 1989 indicate total dissolved solids (TDS) concentration ranging from 450 to 500 mg/L.

19. Zoning within 1000 feet of the WMF is heavy industrial.
20. The WMF operational areas are designed to enhance the lateral drainage of free liquids and precipitation. According to the ROWD, the facility has a minimum grade of 1%. The runoff water will be conveyed to the facility's evaporation pond.
21. The facility is located in alluvial deposits consisting of boulders, fine to medium grained, slightly cemented sands and silts with lenses of clay mixed with gravel. The USCS classification is GC-CL.
22. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted in November 17, 1993, and designates the beneficial uses of ground and surface waters in this Region.
23. The beneficial uses of ground water in the Lucerne Hydrologic Unit are:
  - a. Municipal Supply (MUN)
  - b. Industrial Supply (IND)
  - c. Agriculture Supply (AGR)
24. Federal regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990 (40 CFR Parts 122,123, and 124). The regulations require that specific categories of facilities which discharge storm water associated with industrial activity to obtain NPDES permits an to implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.
25. The State Water Resources Control Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit.
26. The Board has notified the discharger and all known interested agencies and persons of its intent to issue waste discharge requirements for said discharge and have provided them with an opportunity for a public meeting and an opportunity to submit comments.
27. The Board in a public meeting heard and considered all comments pertaining to this discharge.
28. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these Waste Discharge Requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 ex.seq.).

IT IS HEREBY ORDERED, that Board Order No. 90-078 is rescinded, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger shall comply with the following:

A. Specifications

1. The treatment of disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050 of Division 7 of the California Water Code.
2. Waste material shall be confined to the WMF as defined in Finding No. 7 and described in the attached site maps.
3. Storage of waste shall be limited to the areas designated for such activities. Any revision or modification of the designated area, or any proposed change in operation at the facility, must be

submitted in writing to the Regional Board's Executive Officer for review and approval before the proposed change in operations or modification of the designated area is implemented.

4. Any increase or change in the annual average volume of material to be discharged at the site must be submitted in writing to the Regional Board's Executive Officer for review and approval.
5. If any portion of the facility is to be closed, the discharger shall notify the Regional Board's Executive Officer at least 180 days prior to beginning any partial or final closure activities.
6. Ninety days prior to the cessation of discharging operations at the WMF, the discharger shall submit a workplan, subject to approval of the Regional Board's Executive Officer, for assessing the extent, if any, of contamination of natural geological materials and surface waters (including the Lucerne Valley Hydrological Unit and tributaries) by the waste. One hundred twenty days following workplan approval, the discharger shall submit a technical report presenting results of the contamination assessment. A California registered civil engineer or certified engineering geologist must prepare the workplan, contamination assessment, and engineering report.
7. Upon ceasing operations at the facility, all waste, all natural geologic material contaminated by waste, and all surplus or unprocessed material shall be removed from the site and disposed of in a manner approved by the Regional Board's Executive Officer.
8. The discharger shall establish an irrevocable Financial Instrument for closure in any amount acceptable to the Regional Board's Executive Officer. The closure fund shall be established (or evidence of an existing, irrevocable closure fund shall be provided) within six months of the adoption of this Order.
9. Surface drainage from tributary areas and internal site drainage from surface of subsurface sources, shall not contact or percolate through the waste discharged at the site.
10. The exterior surfaces of the disposal area, including the intermediate and final Landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.
11. Waste material shall not be discharged on any ground surface, which is less than five feet above the highest anticipated ground water level.
12. The discharge shall not cause degradation of any water supply.
13. The discharger shall use the constituents listed in Monitoring and Reporting Program No. 00-009 and revisions thereto, as "Monitoring Parameters". These monitoring parameters are subject to the most appropriate statistical or non-statistical tests under Monitoring and Reporting Program No. 00-009, and any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the Unit.
14. The discharger shall implement the attached Monitoring and Reporting Program No. 00-009 and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the WMU, or any impairment of beneficial uses associated with (caused by) discharges of waste to the WMU.
15. The discharger shall follow the Water Quality Protection Standard (WQPS) for detection monitoring established by the Regional Board pursuant to Title 27. The following are four parts of WQPS as established by the Regional Board (the term of art used in this Board Order regarding monitoring is defined in the attached Monitoring and Reporting Program No. 00-009, and revisions, thereto, which is hereby incorporated by reference).
  - a. The discharger shall test for the monitoring parameters and the Constituents of Concern (COC) in the Monitoring and Reporting Program No. 00-009 and revisions thereto:

b. Concentration Limits – The concentration limit for each monitoring parameter and constituents of concern for each monitoring point (as stated in Detection Monitoring Program ), shall be its background value as obtained during that reporting period.

c. Monitoring points and background monitoring points (if any) for detection monitoring shall be those listed below and part II.B. of the attached Monitoring and Reporting Program approved by the Regional Board's Executive Officer. The following are the point of Compliance and background monitoring points:

Point of Compliance MW-1, MW-2, and MW-3

d. Compliance period – The estimated duration of the compliance period for this WMF is 5 years. Each time the Standard is not met (i.e. releases discovered), the WMF begins a compliance period on the date the Regional Board directs the discharger to begin an Evaluation Monitoring Program, If the discharger's Corrective Action Program (CAP) has not achieved compliance with the standard by the scheduled end of the Compliance Period, the Compliance Period is automatically extended until the WMF has been in continuous compliance for at least three consecutive years.

16. One year prior to the anticipated closure of the facility or any unit (portion) thereto, the discharger shall submit to the Regional Board, for review and approval by the Regional Board's Executive Officer, a final closure and post-closure maintenance plan in accordance with Title 27. The final closure maintenance plan should include seismicity studies.
17. The discharger shall remove and relocate any unacceptable wastes that were brought or discharged at this WMF in violation of these requirements.
18. Water used for the process and site maintenance shall be limited to the amount necessary in the process and for dust control.
19. The WMF shall be protected from any washout or erosion, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.
20. The discharger shall not cause the release of pollutants, or waste constituents in a manner, which could cause a condition of contamination, or pollution to occur.

## B. Prohibitions

1. The discharge or deposit of liquid and solid waste other than class III non-hazardous and inert waste as defined by California Code of Regulations, Title 27, at this site is prohibited.
2. Mitsubishi Cement Corporation is prohibited from accepting, treating or composting the following wastes:
  - a. Municipal solid waste; except lunch refuse
  - b. Sludge (including sewage sludge, water treatment sludge, and industrial sludge); Septage
  - c. Liquid waste;
  - d. Animal waste;
  - e. Oil and grease derived from petroleum product;
  - f. Hazardous, designated, and other wastes determined by the CRWQCB to pose a potential treat to water quality; and
  - g. Hot, burning waste materials or ash.
3. The discharge or deposit of hazardous, designated waste (as defined in Title 27), and other wastes determined by the CRWQCB to pose a potential threat to water quality at this site is prohibited.

4. The discharge of liquid or semi-solid (i.e., waste containing less than 50 percent solids) to the landfill WMU is prohibited unless approved by the Regional Board's Executive Officer.
5. The discharger shall not cause degradation of any groundwater aquifer and water supply.
6. The discharger of waste to land not owned or controlled by the discharger is prohibited.
7. The discharger shall neither cause nor contribute to the contamination or pollution of ground water via the release of waste constituents in either liquid or gaseous phase.
8. Direct discharge of any waste to any surface water or surface drainage courses is prohibited.
9. The discharger shall not accept feedstock deliveries made to the WMF that contain the following materials:
  - a. Hazardous material such as poisons, toxins, pesticides or pesticide containers, as defined in Title 22 of State of California Code of Regulations (CCR)
  - b. Material containing PCB's creosote, arsenic, pentochlorophenolds, petroleum hydrocarbons, and diesel or gasoline residues.
  - c. Group I wastes as defined in Title 23 CCR, Chapter 27
  - d. Dead animals
  - e. Hot, burning waste materials, or ash
  - f. Explosives or combinations of waste/material that could spontaneously burn or explode
  - g. Painted wood
  - h. Wastewater treatment sludge
10. The discharger shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned for Detection Monitoring pursuant to Monitoring and Reporting Program No. 00-009 and revisions thereto.

#### C. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 00-009 and future revisions thereto, as specified by the Regional Board's Executive Officer.
2. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
3. Prior to any modifications in this facility, which would result in material change in the quality or quantity of discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board and obtain revised requirements before any modifications are implemented.
4. All containment structures and erosion and drainage control systems shall be designed and constructed under direct supervision of a California Registered Civil Engineer or Certified Engineering Geologist, and shall be certified by the individual as meeting the prescriptive standards and performance goals of Title 27.
5. The discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
6. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
7. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
  - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
  - c. Inspect at reasonable times any facilities equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
8. The discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement action.
  9. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with this Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures.
  10. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
  11. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.
  12. The discharger shall comply with the following:
    - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
    - b. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and any all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board's Executive Office at any time.
    - c. Records of monitoring information shall include:
      1. The date, exact place, and time of sampling or measurements.
      2. The individual(s) who performed the sampling or measurements.
      3. The date(s) analyses were performed.
      4. The individual(s) who performed the analyses.
      5. The results of such analyses.
  13. Monitoring must be conducted according to test procedures described in the Monitoring and Reporting Program No. 00-009, unless other test procedures have been specified in this Board Order.

14. All monitoring systems shall be readily accessible for sampling and inspection.
15. The procedure for preparing samples for the analyses shall be consistent with Monitoring and Reporting Program No. 00-009 and any revision thereto. The Monitoring Reports shall be certified to be true and correct, and signed, under penalty of perjury, by an authorized official of the Company or his designee.
16. The discharger is the responsible party for the waste discharge requirements, and the monitoring and reporting program for the facility. The discharger shall comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions, including Regional Board Orders or court orders, requiring corrective action or imposing civil monetary liability or in modification or revocation of these waste discharge requirements by the Regional Board.
17. The discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in site conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
18. The discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.
19. The discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.
20. The discharger shall neither cause nor contribute to the contamination or pollution of ground water via the release of mining waste constituent in either liquid or gaseous phase.
21. The Regional Board considers the property owner to have a continuing responsibility for correcting any problems, which may arise in the future as a result of this waste discharge.
22. The discharger shall not cause any increase in the concentration of waste constituents in soil pore gas, soil-pore liquid, soil or other geological material outside the WMU if such waste constituents could migrate to waters of the State in either the liquid or the gaseous phase, and cause conditions of contamination or pollution.
23. The discharger shall submit a Notice of Intent (NOI) to the State Water Resources Control Board to be covered under the Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, Order No. 97-03-DWQ, NPDES No. CAS000001.
24. All monitoring shall be done as described in Title 27 of the California Code of Regulations.

I, Philip A. Gruenberg, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on April 12, 2000.

original signed by/  
Executive Officer